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THE BOUNDS OF RACIAL GEOGRAPHY*

ROBERT M. BROWN

College of Education, Providence, R. I.

Mr. Samuel McChord Crowthers published a few years ago in the Atlantic Monthly Magazine[1] a whimsical essay under the title, "A Plea for an Anglo-American School of Polite Unlearning." The suggestion contained in the title is not a comforting one to a school man. On first reading, the heading of the essay carries an implication that some of the things one learns at school should be unlearned before active work in the world becomes safe or possible. Taking somewhat to heart the hidden charge against the teacher and the curriculum, I endeavored to list the items in geography which might fall into the category of Mr. Crowthers' subjects for "polite unlearning," and it was gratifying to discover that it was not so much the thing that is learned that is dangerous but the incompleteness of the learning. Here is a weak point in some of our geography teaching. The teacher of geography is frequently embarrassed by some pupil who with conclusions overdrawn or with sapiency too little established mis-states the facts and laws of his tutoring—and I suspect that teachers of every line of endeavor are not free from these trials. All people in all branches of study and in all stages of attainment are subject to the limitations and embarrassments of too little knowledge. There is no remedy for this. On the other hand, there are certain goals to be reached in school which are too frequently unattained; certain rungs on the ladder to a school certificate so insecure that the whole structure totters, threatens, and frequently precipitates the climber back into the unresponsibleness of primary school days. Possibly the statement made in a discussion before the National Education Association that a large percentage of the people of the country should be classed as morons; or the army tests which rated the fighting men of the nation

*Presidential address presented at the meeting of the National Council of Geography Teachers, December 27, 1923, Cincinnati, Ohio.

[1] *Atlantic Monthly*, Vol. 100, p. 408, 1907

at a 13-year mentality stage is explainable in part at least on the ground of incomplete instruction in the grades as easily as on the basis of incapability.

It is not possible to cover in a brief address the various phases of geography in which an uncompleted topic is a usual procedure. There are many of these lines of study begun with enthusiasm in the third, fourth and fifth grades but left then as finalities altho only rudimentary statements of fundamental laws or partial truths which should be at a later stage expanded have been imparted to the pupils. This discussion must be limited to a single line of teaching, in many ways the most important line which runs thru all the years of the geography lesson, namely, the teaching of racial geography.

I could suggest to Mr. Crowthers a good curriculum in racial geography, for my list of items which I would like to have many people who have passed beyond the doors of our schools unlearn is both large and varied; and with Mr. Crowthers I believe that until these things are unlearned no progress in this line is possible. Some of these items are hold-overs from past presentations in geography when definitions reigned and classifications, more simple than real, were sought. There are signs then that some of these too might pass away, and a more comforting future looms up before us.

That the teaching of racial geography presents difficulties must be admitted at the outset. In the study of geography, most pupils get their first contacts with peoples of distant lands and in many cases their only knowledge of other peoples derived in school arises from this source. Two conditions confront the teacher here; first, it is of paramount importance that proper presentation of these peoples be made, and secondly, that the right impressions of distant peoples be strong enough and have such a reasonable basis that the influence of street corner and even of home cannot eventually wreck it. One of the most crying needs in the world to-day is for peoples to know and understand each other. Just after the World War, Commencement addresses played upon this theme with unvarying monotony, but latterly it has been relegated to the background as a platform topic, altho the subject is still left, where it will always belong, in the hands of the teacher. Secretary Hughes in his University of Michigan address of that year emphasized the need of a sound public opinion, declaring that the untruths concerning the peoples of the earth are the greatest present hindrances to the country's foreign policy; and the British Ambassador was talking at the same moment in a similar vein at Brown University.

We have not in this country in any adequate way defined the limits of the work in geography so far as peoples are concerned; we have rather accepted our types of teaching in this particular as an inheritance with little or no thought or improvement. There are some admirable suggestions for us in print, notably Dryer's classification[2] of men according to their prevailing economies and Huntington and Williams's presentation of communities.[3] These and others similar erase all invidious distinctions and emphasize alone attainments and the efficiency with which the peoples utilize the natural resources of the earth. I am prompted in this connection to suggest that the word "race" which has been and still is worked overtime, be given a long and much needed vacation; I suspect that for most cases where the word is used, "stock" is the proper word, anyway, and not "race."

Three points will be made concerning the peoples of the earth which appear as desirable attainments in the teaching of geography in the immediate future. These are not set down as finalities but are offered merely as sign posts along the way. Modifications of the list of facts are therefore within the realm of every student of the subject and probably a desirable exercise since communities differ so much in the United States; but there can be no modification of the intent or idealism of the demands set down as a minimum requirement.

Vocabulary of Racial Geography

"We limit ourselves," so Mr. Crowthers sets down as one of the aims in the School of Polite Unlearning, "to seeing that a few things which make the people of one country obnoxious to the people of another shall be thoroly unlearned."

The better teaching of the peoples of the earth demands a new vocabulary on the part of the teacher. We have been talking in provincial terms not in world terms. For a long time, I have suspected that such words as "savage" and "uncivilized" are applied carelessly and with reckless abandon, and that the word "civilized" is too easily appropriated; that the categorical classification of races into Mongolian, Caucasian and the like, or the more simplified (and horrified) Black, White, Yellow and Brown is not a function of geography; and that it is only a perverted human trait to classify mankind as Greeks and Barbarians.

A subdivision of peoples as advanced and backward peoples may be maintained with dignity if by advanced peoples are indicated those

[2] Elementary Economic Geography, pp. 91-93
[3] Business Geography, pp. 135-214

who thru the years have accumulated acquirements with only an indirect reference to individual attainments. The most advanced people is the one that has accumulated the most knowledge, the most experience, and the most social tendencies which we can call sympathy; and the most backward peoples have the least of these. This is a judgment of groups and permits the most advanced nations to harbor the most backward individuals, and conversely the most backward peoples, most advanced individuals. Otherwise one cannot account for Gautama Buddha, Booker Washington, King Menelik and a host of others on one side, and our lowest and most degraded types on the other.

In the same connection, a better teaching of peoples will demand that the teachers and pupils form the habit of talking about distant peoples in the same terms and with the same vocabulary that they use when speaking of themselves and their neighbors. For example, one of our extensively used geography readers makes the statement that the people of the Nubian Desert smear their bodies with grease and tallow. No explanation of this act is offered altho an easily attainable geographic explanation for the act can be found and it would have improved the text. But it is the phraseology that is used and not the sins of omission which is the real objectionable feature. I wonder how many teachers use this material without making a grimace or giving the impression that it is a vulgar habit; then possibly teacher goes off on an automobile ride and because the day is sunny or windy and her complexion is endangered she applies cold cream as a preventative. I wonder again how many teachers using the text have made the connection between the two acts. Why, my point is, do we have the Nubian smear his body with grease and thereby practically state that he is an inferior being; and at the same time have the delicately complextioned of our own land apply cold cream? Why change the vocabulary for the distant peoples?

Let us then not use the words "civilized," "uncivilized," and the like unless we know that we mean them; let us not classify peoples into divisions, originally and with proper use justified but which now carries a note of offensiveness; let us not use terms that please the user because of vainglorious distinction; let us not talk of the peoples of distant lands in other terms than we use of ourselves; and on the positive side let us try to appreciate peoples in our study of geography in terms of their opportunities not in terms of ours.

TYPES OF PEOPLES

In the second place it appears to be within the realm of the student of geography in studying the regions of the earth to learn that different

types of peoples have developed under different conditions of isolation and peculiar combinations of environment. Just what is the middle ground between ethnological classifications of races and the knowledge which geography should yield, it is difficult to determine, altho that there is an overlapping common factor every one agrees. In general, the geographer calls his own all results of the physical controls upon the human race, and if these can be concentrated into groups, or some of them are found to be characteristic of one group of peoples and some of another, then it is in the interest of clearness and ease of description to designate these characteristics under the heading of a nation or stock of people. Thus, most post-war books are insisting on the use of the threefold divisions of European peoples, the Nordic, the Mediterranean, and the Alpine; it is suggested further by a few that the difference between the peoples of Egypt with their age-long civilization and those of the Congo forests might be based upon ethnic differences; and finally as an extreme case that India is not very clearly understood until it is realized that to the original inhabitants there have been added invaders from both eastern and western stocks. These are about the limits which writers on racial geography or writers using racial geography set for the students, and they appear to be a fair statement of the needs and limits of the teaching. I am quoting the arguments in the three types or cases presented above from an English book[1] which reflects in one or two instances a different aim from the one which we would adopt in this country, but as a whole the arguments fit our needs. In reference to the threefold European classification,

> The value of this general sketch, which need not be elaborated is that when pupils come to consider the inhabitants of any one country they have a scheme before them into which the inhabitants can be fitted. Merely to say that the bulk of the population of Bohemia and Moravia consists of Czechs and in Slovakia of Slovaks gives little information about the people of Czechoslovakia, but if the pupil realizes that the ethnic affinities (he need not be troubled with the expression) of these peoples are with the Russians, the Poles, and the Yugo Slavs, and not with the Germans or the Magyars, he will have some idea of the position which they occupy in the European family and of the conditions which lend to the formation of their State.

Again, in regard to Africa where the Egyptian is so different from the dweller in the Congo Basin, it is written:

> Hence we are forced to distinguish the Mediterranean stock of the north from the Negro of the center and the south. Further distinctions in the Mediterranean race, for example that between Hamites and Semites, are obviously not for the ordinary school course.

Again, in regard to India:

> In appearance the people vary from some who are almost creamy white in complexion to others who are jet black. In civilization they range from those who are at least on as high

[1] R. N. R. Brown, O. J. R. Howarth and J. McFarlane, The Scope of School Geography

a level as European man to those who worship stones and still delight in human sacrifices. All that can be done is to point out that these differences exist, and this the teacher can best do by showing that India, because of its fertility, has always been desired by the peoples of less favored lands, and that in addition to the original inhabitants, of whom we know little, there have been invaders, some of whom were akin to the Mediterranean race, while others were of Mongol extraction. If the information thus given does not carry the pupil very far it at least ensures that he will not fall into the error, which the examiner knows is very common, of regarding the people of India as Negroes, and imagining that they should be ruled as such, or the equally fatal blunder of regarding all the inhabitants as being at the same cultural level with a common national sentiment.

THE STUDY OF CUSTOMS

In the third place, when we have set ourselves a minimum assignment on the origin of peoples, it is somewhat necessary to define and delimit the scope of the work which the classification entails.

The movement of Americanization which has spread with great impetus over the land during the last ten years has for its immediate object the unification of the nation. It attempts to pour the immigrant into a supposititious mold and turn him out an American citizen. If we are believers in this movement, and our conditions of national existence force us to be, we must admit that there is a mold, a goal to be attained which is different from anything brought to these shores by any of the groups of peoples from Europe or elsewhere. This is the American. He cannot be discovered by the calipers of the anthropologist, nor can he be constructed by the material adornments of the shop-keepers. Externally he has adopted our dress, our manners, our types of living, and our national culture; internally he has subscribed to our ideals. The material culture is purely veneer, it may be assumed by any itinerant visitor or worn by the traitor; the adoption of our ideals, the thing we mean by the term "patriotism" is the desirable quality. In like manner it is possible to know the nations of the earth not by a casual mention of their dress, what they eat, and how they comport themselves, these are but the external signs of their nationality which may be assumed by any vagrant, but by a study of the aims and aspirations of the entire people, expressed infrequently in their daily life or in their current trend of thought, but definitely embodied in the life stories of their heroic dead and woven into their folklore and their national anthems. But this is not all geography. True, but we are not claiming that geography can tell us all things about all peoples. The work of the geography lesson must be supplemented by work in other departments.

It is essential to learn that race and nationality are not the same thing, that a man may be born with certain characteristics which place him in a group but that his adoptions may definitely and finally

assign him to another. America has many examples of this altho it does not contain the only ones, nor necessarily the newest cases. All nations have to a more or less degree a similar history.

It is true that the sum total of all the small and oftentimes seemingly insignificant and unaccountable acts of groups of peoples reach a totality which results in adherence and even idealism, yet the impossibility of the task of knowing and appreciating all of these makes any beginning of the work seem very superficial, and if this is used as final knowledge, it becomes very dangerous. Certain it is that conclusions drawn concerning peoples of distant lands when the only knowledge consists of a few habits and fashions of doubtful value has been detrimental to the teaching of geography.

A part of a people's status is the result of the environmental factors. Backward peoples are backward because the struggle against over-mastering physical controls is too severe. One stage in the study of the peoples then is a study of their peculiar environment. I cannot go so far as Von Engeln[5] in his statement "that the one comprehensive and completely satisfactory explanation of the origin and development of nationality is to be found in the adjustment of peoples to the land in which they live." If this were true when the sum total of the geographic controls were known, the nationality of that region could be known. The task is not so simple. Nationality is a social convenience, a ritual that is not contrived but has been nurtured thru storm and sunshine into its present form. "Its essence," says Powers,[6] "is not an agreement but a sentiment, or rather a complex maze of sentiments, associations and attachments, the product of incredibly slow growth." To the knowledge of the physical environment which determines this adjustment, there must be added the peculiar sentiments of the people, and here history and the social studies must be invoked to help out the geography lesson.

Conversely the teaching of geography should also minister to national unity. It can do this in a narrow way. "The question, 'What is Germany?' is reported to have been asked in a German school, and the answer, prompted by the teacher was, 'Germany is a land entirely surrounded by enemies.' This incident in its details may be true or not, but it certainly illustrates aptly enough the use which that subject has been put to in the German schools."[7] On the other hand it ought to contribute to national unity in a perfectly proper and legitimate way and not at the expense of another people.

[5] Inheriting the Earth, p. 32
[6] The Great Peace, p. 24
[7] E. H. Reisner, Nationalism and Education

It is only necessary to make the pupil intelligent about the national economic problems to convince him of the necessity and the justice of many national policies to make him a part of them.

SUMMARY

To insure a high plane in the teaching of the peoples of the earth, it is necessary for the teachers of geography to study their vocabulary in order that true and at the same time fair impressions be made. Words originally good which by misuse have accrued somewhat allied but supercritical suggestions and meanings should be used with discretion or discarded altogether; words which carry in their use inherently, or in the manner of use, any criticism of race or stock should not enter into a geography lesson; and the language of the lesson in descriptions of peoples as in descriptions of places must be exact and thruout in a similar strain.

It is probably necessary to use some of the origins of mankind since certain stocks show certain characteristics due to an origin under the same peculiar enviromental factors, and have thereby the clan mark. This is distinctly a time saving device which when the background is well in hand becomes thereby a duty. Care must be taken, however, not to invade the field of ethnology or use racial stocks in an unrelated way.

A careful study of the traits of peoples must be made in order to determine which ones represent best the nationality under study. This process if carried out rigidly would in all probability discard many of the statements now prevailing in geography lessons of today. Such a vast improvement in this line is evident in recent books that one naturally expects perfection within a few years, but teachers are more strongly affected by traditional methods than by the novel ones and much strong pressure is necessary still in this direction.

THE PLACE OF GEOGRAPHY IN THE JUNIOR HIGH SCHOOL*

W. R. McCONNELL

Miami University, Oxford, Ohio

A movement for the establishment of the junior high school began during the last decade of the nineteenth century. In the report of a committee on college entrance requirements in 1899 a stand was taken in favor of unifying a six year high school course of study beginning with the seventh grade. This committee declared the seventh grade rather than the ninth to be the natural turning point of the child's life as the age of adolescence demands new methods and wiser direction. The suggestion was that the transition might be made less abruptly by changing gradually from the one teacher regime to a system of special teachers. Specific recommendations were made looking to the introduction of high school subjects into the seventh and eighth grades.

Up to 1910 the development of the junior high school movement was slow. In that year only twenty-six cities reported a course of study for a six year high school. The programs of study of these schools showed nothing more than the bringing down of certain high school subjects into the seventh and eighth grades, and the introduction of some departmentalized teaching.

In a copy of the *Elementary School Journal* issued in 1916, Professor Horn of the School of Education of the University of Iowa, stated in substance that if the junior high school is in reality an institution worthy of its place in our educational economy, it is an institution which is neither an elementary school nor a high school, but a provision for the needs of those children for which neither of the older institutions made provision. It partakes of the nature of each, but 'is essentially different in character. Professor Horn and a host of contempoary educators stress the principle that the subject matter for the junior high school should be reorganized from a social standpoint.

Statistics tell the story of the rapid increase in the number of junior high schools in each succeeding year of the last decade. All the books written about the junior high school have appeared since 1915 and they find many interested readers. The junior high school movement is sweeping the schools of our country. As early as 1916 it was stated that thirty-eight states and 186 cities and towns had

* Presented at the Cincinnati meeting of the National Council of Geography Teachers, December 26, 1923.

junior high schools, and many other cities and towns had them partly organized or had plans for their establishment in the near future. Exact figures are not available, but there are more than 1500 junior high schools in this country today. The movement has now passed the experimental stage and has reached the period of readjustment. Any examination of the background of the junior high school shows it to be resting upon increasingly fundamental bases so that its permanency seems well assured. However, the organization of the junior high school and the methods that shall bring it to its greatest usefulness are still in the process of evolution. Many writers, prominent in the educational world are now conceding the significance of the program of studies in the reorganized junior high school. It is because of my personal conviction that the junior high school is with us to stay, and because of an equally strong conviction that its organization including its curriculum is still in the process of being evolved that I am calling your attention to the place of geography in the junior high school program.

THE PRESENT STATUS OF GEOGRAPHY IN THE JUNIOR HIGH SCHOOL

We may fairly raise the question here whether the aims of the junior high school demand that courses in geography be maintained, altered, or entirely abandoned. Certainly no one would argue for a place in our schools for any subject on grounds no wider than mere tradition. In the Fifteenth Yearbook of the National Society for the Study of Education published in 1916, the curricula of seventy-five of the best junior high schools then operating set forth the work that those schools were doing in geography. It was found to be as follows:

7th grade geography was required in 51 schools
7th grade geography was elective in 3 schools
8th grade geography was required in 17 schools
8th grade geography was elective in 1 school
9th grade geography was required in 1 school
9th grade geography was elective in 1 school

Here we see that practically all schools required a year of geography in either the seventh or eighth grades, but there was conspicuous lack of continuous required geography. In a discussion of the principles underlying the reorganization of the several subjects, geography is not mentioned. This can only mean that either there was a feeling that geography was not to be given at all in the junior high school or else it was to be treated as in the grades of our schools.

There is little reason to believe that the amount or kind of geography offered in the junior high school has changed to any considerable

extent since 1916. Professor Koos of the University of Minnesota, has made a profitable analysis of junior high school programs as a result of which he lists three types of curricula: where all pupils take the same subjects he styles the curriculum, a single curriculum; where the pupils elect to take such courses as academic, commercial, home economic, or manual arts, he speaks of a multiple-curriculum; and he designates the curriculum of schools that require certain subjects and offer others as electives as the constants-with-variables type. His analysis shows that representative schools with the single curriculum offer geography three hours per week in the seventh grade. No geography was offered in the eighth grade. The multiple-curriculum was in use in about 25 per cent of the junior high schools, and in the eighth grade of a representative three year junior high school of this type, history and geography together constitute one required unit of work in the academic, commercial, home economics and manual arts courses. In a representative program of the constants-with-variables type, which Mr. Koos recommends as the most desirable type of curriculum, geography is neither a required nor an elective subject in the ninth grade.

Mr. J. H. Rogers in an article on the junior high school curriculum in the *School Review*, March 1921, reports on a study he made of 110 junior high schools. He found that in the seventh grade, geography was required in 79 per cent of the schools having a six-two-four plan and in 75 per cent of the schools having a six-three-three plan. It was required in the eighth grade in 25 per cent of the three year junior high schools and in the ninth grade of 3 per cent of these schools.

Geography as a Social Study in the Junior High School

In the Fifteenth Yearbook of the National Society for the Study of Education in connection with a discussion of the principles underlying the reorganization of the social sciences, one finds that under the head of social subjects are included community civics, elementary economics, history, and geography. It is pointed out that the aim of these studies is to aid the pupil in interpreting his immediate social environment and in establishing a standard of conduct with reference to civic institutions. Sixteen schools according to the report in the Fifteenth Yearbook require either in the seventh or eighth grade: history and geography; history, civics, and geography; or civics and geography.

In an address before the Geography Round Table of the Pennsylvania Teacher's Association, in December 1922, President John A. H. Keith of the State Normal School of Indiana, Pennsylvania, stated

in substance that if teacher's colleges are to make any contribution to geography their first service will be to class it with the social studies instead of with the sciences and to think of it as a series of relationships which have grown out of social needs.

Professor David Sneddon, Teacher's College, Columbia University, in a recent book on "Sociological Determination of Objectives in Education" speaks of geography as a social science and incidentally he states that it should be prescribed for all students in the junior high school.

At the National Superintendent's meeting in Cleveland in February, 1923, a group of educators discussed the nature and content of social studies in our public schools. Their discussions are embodied in the Twenty-second Yearbook of the National Society for the Study of Education. The discussions indicate quite clearly that such men as Dr. H. O. Rugg of the Lincoln School of Teacher's College, New York City; Dean C. H. Judd of the University of Chicago, and Dr. Ernest Horn of the University of Iowa believe that geography has much to contribute to the program of social studies.

Thus, there is at present a decided tendency to get away from the physical aspects of geography which have been emphasized in the past and to give the subject its application and its social significance. Personally, I am pleased with this re-location of the emphasis, for I believe that the social aspects of the subject will give to it a greater field of usefulness.

OBJECTIVES IN JUNIOR HIGH SCHOOL GEOGRAPHY

If geography is to be thought of as a social study then the objectives of a social education will be the objectives of geography. It must be obvious to any student of modern educational tendencies that the demonstrated needs of society and of individuals must determine the objectives of any particular organization of subject matter. The study of geography can no longer be regarded as an end in itself, but it must be thought of as being a means toward the realization of ends that may not as yet be quite clear, but ends that admit of being defined with increasingly greater exactness.

The developing child at the junior high school age is ready to take on a new set of attitudes. It is a period of widening interests, and all social science material should be directed toward the development of right attitudes, appreciations and ideals. It is not information that is needed, altho we may use information in establishing attitudes. The attitudes we wish to develop will determine the choice of materials in our geography work.

I think we may assume that one large composite aim of education is good citizenship, and if geography is to make its contribution toward this end it must help prepare people to intelligently participate in social, economic, and political life as it is today, and it must seek to fit them to be constructively critical of existing social organizations so they may meet the demands of a rapidly changing society. Surely in teaching any subject one should ask one's self, "Will this give training in effective moral conduct functioning in life?" So far as the subject of geography is related to this question, one might say that effective moral conduct depends on an appreciation of environment and its relation to social interests. A citizen is called upon to take a certain stand on international problems. For example, one hears that Germany objects to paying so large an indemnity because it is robbed of its farming lands and other natural resources. Unless we know geographic conditions we cannot intelligently decide whether or not this is true. What should be our attitude toward the proposed changes in immigration laws? Why should we seek to discourage or prevent more immigrants from southern Europe? What factors enter into any consideration of such international problems as the Asiatic situation, and the various situations in which we find ourselves in relation to our Pan-American neighbors? These are but typical of numerous present day problems, both national and international in character, that would require a knowledge of geography at every step in their understanding and solution.

Geography can give to students, as can no other study in the junior high school curriculum, an abiding and effective interest in peoples of the earth and in their relationships, problems, advantages and disadvantages. Its study should so reconstruct one's experiences as to permit one to enter fully and humanly into the activities of men in different regions and different social classes. Its study should lead one to take on a sympathetic attitude toward people in all parts of the earth. It should show the rights earned by each independent group by revealing the services it renders to all other groups. Surely one of the most influential factors in conduct is right relationships due to understanding, and geography can and should give a more intelligent understanding of people—their ideals, problems, limitations and possibilities—than any other school subject. An understanding of the environment of the Italian, Czech and Slovak, or Pole is certainly the first step toward an understanding of their national ideals and policies.

THE PROBLEM AS AN AID IN ORGANIZING SUBJECT MATTER IN GEOGRAPHY

In the junior high school, students have the capacity to deal with problems thru reflex thinking, and social science material should be organized in terms of problems which will confront the student when he gets out of school. Perhaps the chief criticism made of geography work is that too many lessons are assigned by pages in the textbook and that the individual teacher adds very little in the recitation. In his book, "Democracy and Education," John Dewey points out that in history and geography there is found the greatest danger that subject matter will be accepted as appropriate educational material simply because it has been customary to teach and to learn it. "The words history and geography," says Dewey, "Suggest simply the matter which has been traditionally sanctioned in schools. The mass and variety of this matter discourage any attempt to see what it really stands for and how it can be so taught as to fulfill its mission in the experience of the pupils."

The problem method of teaching is a movement of great significance. Educators are favoring a wide use of this method of teaching because it leads to the disentanglement of primal factors and principles which would otherwise be lost in a mass of irrelevant details. Effective instruction in any subject demands that leading factors and principles must be made the focus of conscious attention. To this end the selection and disentanglement of primal factors constitute the first step in tood teaching. The content of geography, especially, demands organization. Recitation periods in the junior high school should be largely periods of problem solving. One of the criticisms offered by a writer in the field of education recently was to the effect that much of the organization of geography textbooks tends to inhibit thinking rather than to encourage it; that the geography books are encyclopedias with which we teach the child about the various physical, economic, and social surroundings; that tests have shown that the children cannot and do not remember these facts, and that studies of social demands show that there is no need to be able to remember most of them. It would seem that the seriousness of this charge should be sufficient to cause us as a group of geography teachers to consider the matter of selection and evaluation of subject matter quite carefully.

In problem solving much material found in the ordinary textbook of geography will never be used, and it should not be used, while on the other hand the teacher will discover the greatest need for supplementary material bearing on certain phases of the problem. In the geography work of the junior high school the character of the material

rather than the amount should determine whether or not it is to be included. It seems to me we will always be confronted with the question of teaching a few brief statements about many different topics or giving a full development of a restricted number of fundamental matters. I am convinced that the latter is the only sensible thing to do. The teacher must select what she can get from the geography text that bears upon the fundamental matter which she is considering and supplement this with a wealth of additional material, omitting the irrelevant and non-geographic matter appearing on the pages in the textbook.

Geography versus a Unified Social Science

We find a wide difference of opinion among present day educators relative to a unified social science course. Some argue for the preservation of the identity of the several subjects as geography, history, and civics; others for a generalized social science to supplant these. Professor Rugg of the Lincoln School, Columbia University, advocates a unified social science. He states in substance that he is confident that the division of our social sciences into separate school subjects hampers the teacher. He admits, however, that he has no scientific basis for such a conclusion. His chief argument for the need of a unified social science is that materials from the different subjects are demanded for a successful lesson. He would say for example, "How may one teach the child the history of our western movement, the settlement of our country and the exploitation of its natural resources without constantly needing to call up facts of topography, location and the like which for several generations have been called geography?" He concludes that this can not be done and argues for a general social science, getting material from whatever school subject may contain the material that is necessary in solving the problem under consideration.

Professor Bobbitt of the School of Education, University of Chicago, agrees with Professor Rugg, that a general social science should supplant geography, history, and civics in the junior high school. He admits, however, that in our present transitional stage no one can be dogmatic.

Opposed to the views of Professors Rugg and Bobbitt are the views of such prominent educators as Professors Bagley and Bonser of Teachers College, Columbia University, and Professor Horn of the School of Education of the University of Iowa.

Professor Bagley states that in his opinion it would be a great mistake to merge geography and history in a composite course in the

junior high school. He believes that the two subjects should, however, be closely related, in that the geographic phases of history and the historical phases of geography should be given appropriate emphasis, but he is confident that the autonomous existence of these subjects should be preserved. "Geography like history is essentially a liberal study. As I see their functions, history widens the time horizon, and geography widens the space horizon of the pupil. To teach either from a narrow, utilitarian, point of view would be to defeat what I consider the most important objective of education."

Professor Bonser's views are in accordance with those of Dr. Bagley. He does not believe social science will wholly supplant geography and history in the junior high school, and he does not think it should. As to the correlation of geography and history, Professor Bonser has this to say, "I think as much correlation should be taken account of as problems require. Correlations are not made, but exist. Whenever a geography problem can be more readily interpreted by the use of history, the history should be used; and when geography helps to interpret history, the geography should be used; Work in social sciences usually deals with problems requiring some elements from history and geography. However, there are a good many problems of human life to which geography contributes quite apart from anything of material historical connection, and I believe these problems should have their proper place for such intensive study as they require to get the most out of them."

These ideas coming from prominent educators who are actively engaged in studying the problems of the curriculum are indeed comforting to those of us who believe that geography has a distinct contribution.

If geography is to be merged with history and other subjects to form a general social science in the junior high school curriculum the greatest care must be exercised to see that it is not lost in the merging. I am convinced that one of the reasons why there is not the same pressure for the teaching of geography in the junior high school and high school as for government and even economics and sociology is because there are but few professors of geography in our universities.

My observations lead me to believe that in courses where geography is supposed to be merged with other subjects there is a strong tendency to neglect it entirely. . Both geography and history have content elements so definitely important in their respective fields and so little related to each other that some time in the junior high school period is needed for each. There is much in geography that has very little relationship to history. However, let us not be indifferent to the

correlation of geography and history. If the European background of American history is taught in the seventh grade as it is in many cases, it might be well to correlate in that grade a thoro course in the geography of Europe.

I am inclined to believe that the scraps of geographic information that one would get in the solution of problems in a general social science course would make it difficult to develop a group of geographic principles. Certainly, at some time during the junior high school period there should be a formulation of geographic principles as such; principles of transportation; principles of rainfall; principles of crop production; principles governing the growth of population; principles governing the fixing of the level of the standard of living; principles governing the location of manufacturing plants; and whatever others are needed for the continuing orientation of the pupils. These the pupil should know, and he should have much practice in their application. They should be mastered thru using them.

For example suppose we were taking any current question such as the proposed restriction of immigration. The question is probably one of rather temporary interest, and what we are trying to do is not only to satisfy the present interest and present needs for knowledge on the part of the pupil, but in addition we should aim to place at his disposal a group of principles which will be of permanent value. Thus a vital question to every geography teacher is what shall we do, not only to satisfy the needs of the child as they express themselves in the solution of problems, but also to make the solution of problems a means of placing the child in possession of principles which can be utilized in the solving of future problems that he may meet outside of school life?

I believe that a careful development of the principles and a careful organization of these principles into a larger system of thought can best be accomplished by retaining the social sciences separate and distinct from each other as geography, history, and civics. Some object to this practise on the ground that the child's knowledge is not systematized under headings of geography, history, and civics. But does it follow that it should not be? It seems to me that if effective thinking can take place only when knowledge is well organized then the sooner we can get the child to organize knowledge both with reference to practical life and with reference to the facts themselves, the better. Unless knowledge is classified one can not solve certain geographic problems efficiently because one does not have one's knowledge under control. We must grant that it is perfectly possible with our poorly written textbooks in geography, history and civics to omit some very vital elements in the child's training, but the problem can be met by improving our textbooks in the several fields.

Whatever advancements are made in the junior high school it seems clear that geography is to have a place in the curriculum whether as a separate autonomous subject, or as a part of a general social science. As a group of people interested in the subject matter of geography, I believe that we can do much toward giving to geography its rightful place in the junior high school program. Above all we must welcome the efforts of educators to aid in giving us authoritative courses of study constructed on sound principles, thru the use of scientific methods. Such courses are clearly needed to give teachers and writers of textbooks a platform upon which to stand in their efforts to present geography in such a way as to make it must useful to the country as a whole. We must abandon the idea that a committee can meet and assign certain content material to a particular grade, and we must be ready and willing to cooperate with educators in their attempts to substitute scientific investigation for this committee-opinion method of formulating a course of study. I should welcome something in the field of geography comparable to Professor Horn's "Application of Methods of Research to Making the Course of Study in History." Such a study would apply methods of research to such questions as the following:

1. Are the several values of geopraphy sufficient to justify its present place in the course of study?
2. What are the most important uses which are made of geography in life outside the school?
3. What organization of geography is most efficient in relation to its functions in life outside the school and from the standpoint of teaching?
4. What subject matter in geography is most important for the development of proper knowledge and attitudes in relation to the solution of modern problems? What are the problems?
5. What are the most efficient methods of teaching geography?
6. What are the best tests for measuring the degree to which the purposes as defined in the course of study have been accomplished?

We as teachers of geography should surely be interested in having authoritative scientific methods of research applied by educators to all these problems. I believe that in the long run it would do much toward insuring geography its rightful place in the program. Until this is done we can be safe in trying to do two things in the junior high school, first, to clearly formulate those principles of geography which are most frequently needed in the interpretation of environmental influences on man's activities, and second, to give ample consideration to the geography underlying the solution of our international problems.

TRADITIONAL GEOGRAPHY AND THE PRESENT TREND*

R. H. WHITBECK

University of Wisconsin, Madison

SCIENTIFIC AND PSYCHOLOGICAL CONSIDERATIONS IN SCHOOL GEOGRAPHY

The elementary textbooks of a generation ago were of the informational, memoriter type, mainly descriptive in character and compiled with little if any regard for children's native interests at an early stage of their development. The textbooks presented those facts of geography which the adult author thought school children ought to learn, irrespective of what these children could be expected to take a healthy interest in. Altho phrased, as a rule, in fairly simple language, the ideas too often involved general concepts of the earth such as adults acquire only by years of experience. Most of the texts laid considerable emphasis on map studies and these studies probably were the most useful parts of the books.

A second period began about 1895, following the report of the geography conference of the Committee of Ten and the subsequent report of the Committee of Fifteen. This was the period of relief maps, of the description of land forms, and of the emphasis on physiography generally. Temporarily political and economic geography were crowded out, and physical geography dominated. This spasm in its extreme form subsided within a few years and merged into a notably rational type of geography in which cause-and-effect relations were stressed. This may be termed the period of scientific geography. Educational thought at this time was strongly influenced by the rise of the natural sciences which, during this period, were at their height in the schools. In American education it was essentially an era of the natural sciences as distinguished from the present era in which the social studies have become so prominent. So far as elementary geography was concerned books and courses of study tended to be logical rather than psychological; they were more concerned with being scientific than with being suited to the child's ability to understand. Yet, strangely enough, this was the period of great emphasis upon child study in schools of education; it was the period when Dr. G. Stanley Hall and his studies of child psychology were everywhere talked about. The application of the principles of child psychology

* Paper read at the meeting of the National Council of Geography Teachers, Cincinnati, Dec. 26, 1923.

to the subject matter of geography came later and these principles are now rising to a place of influence in elementary geography. I believe we are now passing from the scientific to the psychological period of school geography; and, in education generally, passing from a period dominated largely by the natural sciences to one dominated by the social studies. The school curriculum has been socialized—possibly oversocialized; for our education will suffer if the more rigorous, quantitative, exact studies of the natural science group are largely crowded out to give place to the easy generalizations, loose reasoning, and absence of hard work on the part of pupils, which are much more characteristic of social studies than of the natural sciences. In gaining the unquestioned benefits of the social studies we do not want to lose the equally unquestioned benefits of the natural sciences.

EVOLUTION OF ELEMENTARY TEXTS IN GEOGRAPHY DURING FIFTY YEARS

In 1870 and 1871 appeared Maury's geographies, which were revised and republished in 1881 and again in 1900. Referring to Maury's early textbooks in geography, the publishers said in 1902: "Maury refused to follow the plan of all accepted textbooks of his day. His plan was to present in simple words and in the form of a story interesting facts about the people of the earth, their homes, their industries and the lands where they live." In at least one respect Maury was ahead of his time; we are only now, after fifty years, coming to appreciate the excellent psychology which Maury tried to employ in these early books.

In contrast with Maury's ideas consider those of a leading text issued in 1898, which says in its preface: "One of the prime requirements is the arrangement of the apparently isolated and unrelated facts of geography into such order that their correlation may be perceived and the unity of nature recognized. When this subject is thus studied in orderly sequence it unfolds itself naturally and logically, each lesson preparing the way for those which follow." In this text "correlation," "unity of nature," "orderly sequence," "logically," seem to be the controlling ideas.

Clearly this author was concerned with the scientific and logical character of his subject matter. He was interested in geography as a branch of science; he wished his book to be scientific; apparently he was thinking less of the kind of geography that can be understood and assimilated by young children.

Another widely-used elementary book published in 1906 says: "This book offers a brief course to pupils that must leave school after

only two years of geography study. . . Its aim is to show man's relation to nature.'

Five years later, in 1911, the same author wrote another introductory geography. Influenced still by tradition and the scientific spirit of the time, he begins by a general treatment of air, water, forms of water, soil, seasons, etc. After a few pages of this, he changes to concrete but general descriptions of "The Dairy Farm," "The Wheat Farm," "Harbors and Ports"; then he passes to a description of actual places: "The Yellowstone Park," "The Great Lakes," "Niagara Falls," and still later to "Children of the Far North," "Children of the Desert," "The Brown People," etc. Here is clear evidence of the evolution of this experienced author's conception of what constitutes suitable subject matter of geography for young children.

Six years later (1917) the same author published still another first book in geography, and in this he went all the way over to the socialized type of book. Note the change in point of view as compared with the earlier book. The author says in the first sentence of the last mentioned preface: "The aim of this book is to present, in a simple and attractive way, the facts that seem to be best suited for the early years of study of geography. The approach . . . is *through a series of stories about people*[1] in their environment . . . the book draws freely on history . . . The book is put in story form *to arouse interest*[1] and thus aid the memory.' So much for the evidence of the evolution of this author's ideas from 1906 to 1907.

Going back to 1910, a leading text published that year says: "The authors believe that rational geography must rest upon a physiographic foundation. When the physiographic facts about a given region are clearly grasped, most of the other geographic facts easily arrange themselves as links in a causal chain." Clearly the authors are thinking mainly of the scientific organization of their material—not primarily, at least, of the very young minds that must try to assimilate it. Like the other books of the scientific period, this one seeks to be rational and logical. It reflects the leaning toward the natural sciences which characterized the time.

Another widely-used elementary book published in 1916 indicates the trend of thought at that date. In the preface we read: "These first lessons of geography, telling how men work and live, are not only an essential part of the study, but they are designed to secure the pupil's interest in the lessons that follow. The child gains new appreciation of what he does and of what is being done around him when

[1] Italics are the present writer's.

he learns that similar things are done in remote lands and he takes in the facts of distant countries and of the earth as a whole *because they appeal to his human interest.*"[2]

An introductory book published in 1921 shows still more clearly the trend of opinion. It says: "The first book in geography has always been the least interesting . . . . . This text has been prepared from the viewpoint of *the child's interests.*[2] General descriptions are very likely to be abstract and uninteresting; *but a detailed description of an actual example*[2] is likely to prove highly interesting, and if it is typical, it can clearly explain a whole class in the most effective way."

The Present Trend

Here we have set forth the view which I believe is coming more and more to prevail, and ought to prevail. Without a doubt we have been for decades trying to force into children's minds an appallingly large number of adult ideas and concepts that are, to a considerable degree, outside of their field of interest and beyond their comprehension.

The text material in our school geographies is usually clear and is expressed in non-technical language. Children can read it, can pronounce the words, and can repeat the statements with a certain degree of verbal correctness. It is not the language that is beyond their comprehension—it is many of the ideas involved. A large proportion of these are adult ideas, mature concepts, which we grow up to only thru years of reading, thinking, study and association. Yet a dozen of them may be placed on a single page. And then we wonder why children seem to forget their geography so quickly and have such inaccurate notions about the subject when they reach the higher schools.

But we are making progress. Writers of textbooks and teachers naturally feel that they can not entirely break with the past. They cannot wholly ignore current ideas; they must not depart too radically from established practices. However, I am persuaded that the trend is in the right direction, for the author of one of the newest elementary textbooks aims at the correction of some of the mistakes of the past by introducing a considerable of the narrative or story-telling quality into his treatment. It would seem justifiable to go even further in this direction. Moreover, future authors must have the courage to omit many, many things which tradition and the fear of being criticised for omissions, now counsel them to retain in their books.

[2] Italics are the present writer's.

For example, we as adults and teachers may feel the importance of understanding why the seasons change; why there are wind belts and why they migrate north and south with the sun; how cyclonic storms affect our weather; why there are zones; what causes the tides; why the various parts of the earth have the average temperatures and rainfall that they do; and many similar facts. But, even tho these facts do belong to the class that we call "fundamental," are they appropriate in the geography of the grades? Can children comprehend them? My experience is that it is difficult to teach them effectively to university students.

May I return to a statement in a recent textbook already quoted: "General descriptions are very likely to be abstract and uninteresting; but a detailed description of an actual example is likely to prove highly interesting."

In that statement is suggested, I believe, the desirable line of progress for improving the content of elementary geography—namely, away from the enormous array of briefly stated, condensed facts which crowd our geographies almost to the bursting point, and away from the effort to give young children such a quantity of information as authors now feel they must include in their books or else be criticised for inexcusable omissions; away from condensed generalizations which can have real meaning only to adults with a wide experience in the world of affairs; and a movement toward the detailed description of actual things in geography—things in which children may be expected to take an interest and things which involve fewer adult concepts.

I am convinced that the content of school geography needs a revision downward, a revision in the direction of the kind of geography found in some of the best geographical readers. Here the authors use space enough to tell their story with a fullness of interesting details that creates actual pictures in the child's mind. Somewhere between the geographical reader on the one hand and the greatly condensed outline of geographical knowledge which we have been crowding into our elementary books, on the other hand, seems to lie the psychological type of subject matter needed in school geography.

Editor's Note. Following the reading of the foregoing paper Professor Whitbeck was asked to submit a brief statement embodying the main idea of his paper in order that the geography teachers present might express themselves concerning it. The following statement was presented and unanimously adopted:

"It is the judgment of the National Council of Geography Teachers that textbooks in geography for the grades contain too many loosely related facts, too severely compressed. We recommend that a smaller number of these loosely related facts be presented in elementary books, thus leaving opportunity for a fuller and richer treatment of selected topics—topics selected with greater consideration of children's abilities and proper interests at the grade school age."

THE CLASSIFICATION AND USE OF GEOGRAPHIC PRINCIPLES*

E. E. LACKEY

State Normal School and Teachers' College, Wayne, Nebraska

GEOGRAPHY AS EXACT AND ORGANIZED KNOWLEDGE

A discussion of the classification and use of geographic principles deals with the philosophy of geography rather than with method or technique of teaching. The writer feels that not enough thought has been given to the philosophy of geography. Our time as geographers is so taken up with new and interesting phenomena, and we are so engrossed with this or that method of procedure that we have all but forgotten that "Geography is the exact and organized knowledge of the distribution of phenomena on the surface of the earth, culminating in the explanation of the interaction of man with his terrestrial environment." We, as geographers, who should constantly keep in mind that geography is *exact and organized knowledge*, have been satisfied with the vague indefinite notion that "Geography is a study of the earth as the home of man," or that "Geography is a description of the earth, its productions and inhabitants."

Geography is not yet exact and organized knowledge. However, it is surely becoming such. But even the writers of our latest textbooks seem to have fallen short of doing the thing that it was hoped they would accomplish, namely, that of duly stressing geographic principles. Nearly two decades ago Professor Tarr did an excellent piece of constructive work for geography as exact and organized knowledge in the generalizations given in his physical geography.

THE THREE ELEMENTAL NOTIONS IN GEOGRAPHY

Let us examine for a few moments the three elemental notions involved in geography. We note at once that we are dealing with two groups of facts, firstly, those facts concerned with human activities and secondly, those dealing with earth conditions. Facts concerning human activities we have pretty well named and classified. There are the great occupations—agriculture, manufacturing, commerce, mining, fishing, etc.—in each of which we may find innumerable facts concerning human activities. Men are raising certain crops in one part of the world, while in other sections crops of an entirely different kind are raised. Manufacturing enterprises in one part of the country differ radically from those in another, while in some sections there are no

* Presented at the Cincinnati meeting of the National Council of Geography Teachers, December 26, 1923.

manufacturing activities at all. In some regions men are engaged in mining while in others no mining is done. The old type commercial geography had the facts of human activities pretty well sifted and cataloged. Of course, some fields of human activity which we consider good geographic material were not included within their category.

Earth conditions, the second of the elemental notions in geography, we also have well classified in physical geography. We know well the facts concerning location, topography, soil, climate, and plant and animal life in different parts of the world. We are conversant with types of rainfall and length of growing seasons. We are familiar with the wind belts of the world, the mechanics of the cyclonic storm, the erosion cycle, and the far-reaching effects of glaciation.

Let me repeat, then, that concerning the first elemental notion in geography, human activities, we are well equipped with adequately organized facts. Concerning the second elemental notion, namely, earth conditions, we are likewise nicely equipped with well organized data. With this equipment concerning these two elemental factors in geography at our command, we are prepared to consider the third and crowning element, namely, geographic principles. Geographic principles are those relationships among geographic facts that have a universal application. Geography, then, is a study of those universal relationships that exist between human activities and earth conditions.

These definitions are ideals toward which to strive. Even now we may consider that the facts of geography, namely those concerning human activities and earth conditions, are exact and organized, but we cannot say that the principles of geography are exact and organized.

How Some Other Subjects Became Sciences

What is it that makes physics a science, that is, exact and organized knowledge? One of the well known texts in physics is divided into twenty-one chapters. In nearly every chapter, after the principles have been developed, they are carefully formulated and stated in italics. For instance, in chapter two on "Pressure in Liquids," there are at least seven or eight principles stated, among which are Pascal's Law and Archimedes' Principle. Among a number of principles stated in connection with the chapter on "Pneumatics" are Charles' Law and Boyle's Law. In the chapter on "Sound" among other principles we find that "The pitch of a musical note depends simply upon the number of pulses which strike the ear per second." The chapter on "Invisible Radiation" states some of the principles involved in the X-ray, radio-communication and radioactivity. The tireless energy of the physicist in working out and formulating the principles

of his subject is to be commended. It is just this that has made physics exact and organized knowledge, and has given to it an exalted place among the sciences.

In looking over a recent book on chemistry we find that the principles are accurately formulated and stated in black-faced type. For instance these principles may be noted, "Equal volumes of gases under like conditions of temperature and pressure contain the same number of molecules"; "The amount of gas which a liquid will dissolve is directly proportional to the pressure of the gas"; and "In every sample of each compound substance the proportion by weight of the constituent elements are always the same." Chemistry is a science because it is exact and organized knowledge.

Many of the principles of meteorology are well formulated in one of the recent texts. For instance, the section on "Insolation" says that the amount of heat received from the sun depends upon three factors. Each of the factors is carefully stated in the following way: (1) "The amount of radiant energy received from any hot body varies inversely as the square of the distance of the point in question from the body"; (2) "When the sun's rays fall upon a surface obliquely the amount of radiant energy received by a unit area equals the amount received by perpendicular incidence multiplied by the sine of the angle of the elevation of the sun"; and (3) "The amount of heat received from a radiating body is directly proportional to the duration of radiation." The best summary that the writer has seen of the principles of meteorology for the geographer, is that by Dr. Visher.[1] Meteorology is exact and organized knowledge and consequently a science, not matured perhaps, but growing nevertheless.

In a bulletin on "Cooperation" published by an Agricultural Experiment Station the principles involved are accurately and briefly stated at the close of the pamphlet. Among others the following is one of the most important: "Delivery is an individual service which should be paid for by the person receiving it, and not distributed among all the patrons of the store." When economics has worked out and stated a large body of such principles it is then exact and organized knowledge and as a result becomes a science.

NEED FOR THE FORMULATION OF GEOGRAPHIC PRINCIPLES

Thus we might continue, illustrating how arithmetic, grammar, biology, political science and many other departments of human knowledge have become exact and organized. But to multiply instances is not necessary for the implication is apparent, namely,

[1] *Journal of Geography*, Vol. 20, p. 254

that we the geographers of the country should see to it at once that the principles of geography are carefully formulated and classified. Now this does not mean that we are to be satisfied with what we have been doing, that is, milling all around a principle until we understand its implication and then running away without trying for a definite formulation of it. But some one objects that already geography has been partly discredited by too many poor and hasty generalizations. Granted that this is true, shall we cease trying for correct statements of geographic principles on this account? Have not the other sciences experienced some of the same vicissitudes? Have not all the generalizations and hypotheses of physics, chemistry and astronomy run the gauntlet of searching criticism? Altho the Laplacian Theory was generally accepted as being true for more than a hundred years, yet careful study in recent years shows it to be incorrect in some of its postulates.

The first sentence in the preface to one of the recent textbooks in advanced geography reads thus: "The purpose of this book is . . . to set forth the great principles of geography in their human aspect." Certainly this is a laudable ambition and the book is a good one. It is divided into several parts each of which deals with some phase of man's relation to his geographical environment. The discussions lead up in a very satisfactory way to the principles involved, but no attempt at the formulation of geographic principles is attempted. Neither is the student asked or even encouraged to formulate the principles in his own language. No doubt the authors have avoided much unfavorable criticism by so doing, for it is not unlikely that the members of geographical organizations would have been the first to criticise rather than to commend such an attempt.

Shall the geographer admit that the principles of his science are so elusive and so etherial that it is impossible for him to formulate them? Shall he admit that all geographical situations are so complex that he is unable to separate them into their elements? Are the relationships among geographic facts so difficult to formulate that the geographer must give it up? If we must answer these questions in the affirmative, then let us turn our materials over to the physicist or the chemist and ask him to formulate our principles for us. Or perhaps it would be better to give up our claims as to the science of geography and distribute our body of attractive materials to the economist, the biologist, the historian, and the sociologist and let these scientists use them as their very own.

But we know that the geographer can formulate the principles of his subject, and that he will do it when he understands that this is just

the thing that is needed to make geography a science and give it a permanent place as such among the sciences. Is it not possible and should not this organization take the lead in promoting the formulation of the principles of geography? Would it not be a fine thing to run in the *Journal of Geography* a series of outlines on the principles of geography similar to the fine exposition of the principles of climate appearing in the *Journal* about two years ago? Would it not be possible, eventually, for us to classify the principles thus formulated so the simple easy ones would be developed in the early grades and the more difficult and complex reserved for the latter grades or the high school? Just this thing has been accomplished in some of the other school subjects.

How the Principles of Home Geography May be Classified

Let us illustrate in a tentative way, if possible, what is meant by classifying the principles of geography. On account of the diversity of materials, and the great scope of the subject there are a number of classifications possible. For instance, we could classify them on the basis of mathematical, physical and political; or industrial, commercial, economic and physical; or, perhaps, home, world and regional. The classification one selects depends, no doubt, on the phase of the subject he wishes to emphasize.

Now, home geography presents several phases of difficulty. There are elements that are suitable for presentation to the earliest grades, other phases adapted to the upper grades, and some portions of sufficient difficulty to engage the best efforts of high school and college students. Home geography is a regional study whether presented in the elementary school or later.

Let us try for a classification of the principles of home geography for the elementary grades. The following is merely a skeleton outline upon which to distribute those principles that should be learned, with no thought as to how they are to be developed or fixed in the minds of the children.

1. Why We Need Homes
2. Why Homes Become Grouped
3. Why Roads and Streets are Needed
4. How Public Business is Managed
5. How the Lay of the Land Affects People
6. How Water on the Land Affects People
7. Why We are Interested in Soils
8. How the Atmosphere Affects our Lives
9. How We and Our Neighbors Help One Another
10. Distance, Direction, and Maps

Within the scope of this paper it is impossible to state more than just a few of the simple principles in connection with two or three of the above topics. Under the first heading, "Why We Need Homes," may be stated the following:

1. A home is a dwelling place where one may share the comforts of life, in private, with the members of his family group.
2. Home to a child should mean food, clothing, shelter, work, love and a good time.
3. We must depend upon many people to help us in securing food, clothing and shelter.
4. Our home community is not able to supply all the necessities of life.
5. Every one in the home should contribute some work in support of the family group.
6. I owe the world a debt of work in return for all the comforts of life that others help to furnish me.

Under the second topic, "Why Homes Become Grouped," the following principles may be stated:

1. People live in groups so they may be mutually helpful.
2. On a cross-roads is a good place to start a village.
3. City and country folks need to help each other.
4. Every worker should produce more of something useful than he needs for his own use.
5. High buildings in the center of a town or a city enable more people to live close to their places of business.

The topic on "How the Lay of the Land Affects People" involves, among others, these principles:

1. We can cooperate with our neighbors best when we are connected with them by good roads.
2. The lay of the land controls in large measure the location of houses, and the way the streets and roads run.
3. Roads and railroads are more likely to be straight in level than in rugged countries.
4. Level or rolling areas are better for farming and rugged regions for pasture or forests.
5. More people live on plains than on high or rugged lands.
6. In rugged or hilly countries it is easier to build roads or railroads in the valleys than on the uplands.
7. Mountain and plains people do not usually engage in the same kinds of work.

The following principles are among those involved in the topic, "Why We are Interested in Soils."

1. Not all soils are equally productive.
2. Plants get water and some food from the soil.
3. All the necessities of life are dependent in one way or another upon the soil.
4. The importance of the soil in any region depends largely on how the people make a living there.
5. Good soils may become poor if they are not cared for properly.
6. Unproductive soils may be improved by proper management.

Some Geographic Principles for More Advanced Students

The following are some of the geographic principles upon which progress depends and are suitable, perhaps, for the upper grades.

1. All permanent progress and prosperity depend ultimately upon the soil.
2. The soil is an inexhaustible resource upon which man may depend when all others have failed.
3. Progress in a country depends in large measure upon the strength and honesty of the government.
4. Good money is one of the greatest conveniences in promoting progress and prosperity.
5. The progress and prosperity of any people depend in large measure upon their ability to find a good market for their surplus products.
6. Without good means of transportation, everyone would have to depend upon his local community to satisfy all his needs.
7. Cooperation due to neighborliness helps to make the people of a country happy, progressive and prosperous.
8. Education makes for progress in that educated people can do more work and do it more effectively than those who are uneducated.

Under the heading of "Human Activities in Relation to Climate," a number of principles may be stated for advanced students.

1. Climate may be an effective barrier or stimulus to the movements of man.
2. Climate is a most potent factor in supplying or limiting man's material needs.
3. Climate has a marked influence upon the health and energy of man.
4. Man reaches his highest development in the temperate regions of the earth.
5. A high even temperature is enervating and human progress is retarded under such conditions.

THE NEED FOR PRACTICE IN THE USE OF GEOGRAPHIC PRINCIPLES

Our textbooks abound in good exercises and problems involving the use of geographic principles. Many more could be added. These should be used purposively and systematically in fixing definitely the principles previously developed. An abundance of practice is just what is needed to make the principles of geography a real part of the working equipment of a useful citizen. It is the great number of problems and exercises that fix the principles of grammar and arithmetic, and make these subjects so popular and useful to the average citizen.

The following problems and exercises involve one or more of the principles previously stated in this paper:

1. How many of the small towns and villages in the vicinity of your home are located at cross-roads?
2. What necessities of life do you enjoy every day that may be secured from the farmer in the country near by?
3. How are both you and "Farmer Jones" benefited by the good road from your home to his farm?
4. Why do farmers often raise a crop of clover or cow peas and plow it into the soil?
5. Account for the location of the Union Pacific Railroad in the Platte Valley.
6. Why are the people in the lowlands of Central America less energetic than those in the highlands?

CONCLUSIONS

These illustrations should serve to make clear what is meant by the classification and use of geographic principles. The writer

believes that this piece of work is the next important step in the progress of geography. He believes that this department of geography is lagging, and that an energetic campaign along this line would lend dignity and popularity to the subject.

Why would not the classification and use of geographic principles be a good line of work for this organization to promote during the year just ahead? Could we not have a committee at work on this problem, and might we not make this topic the core of our program for our next year's meeting? Would it not be profitable to run some articles in the *Journal of Geography* dealing with this problem, and perhaps some press articles calling attention to and popularizing some of the most salient geographic principles? Of course, we must be careful at all times that our generalizations are tested and true. No doubt, we all agree that no other subject can furnish a more attractive and useful body of principles for the guidance of people to a better utilization of the good things of life and a safer and saner world in which to live.

GEOGRAPHY IN THE FOURTH GRADE*

JULIA M. SHIPMAN

State Normal School, New Britain, Conn.

Every teachers' college and normal school with its accompanying training school is a laboratory for educational experiments. I am watching with much interest such an experiment in the fourth grades of our practice schools. We are emphasizing journey geography and type studies as before, but are trying a different approach to the textbooks and supplementary readers. We do not believe in giving every child the same textbook. On their bookshelves we place as large a variety of geographies and geography readers as possible. As the teacher prepares a lesson she makes accessible to the children library books, maps, pictures, and magazines for special reference. The teacher uses for her guide in this grade, "Studies in World Geography" by Ridgley, Ekblaw, and Dillon.

Let us suppose they are to take the first lesson in the book called "From Coast to Coast on the Lincoln Highway." The teacher talks with the children about our national highways, and tells them the history and general route of this one. Together they make plans for the trip; decide what make of automobile to buy, and what equipment

* Presented at the Cincinnati meeting of the National Council of Geography Teachers, December 26, 1923.

is needed, not forgett ng a kodak for pictures. It is suggested that they make a tripbook to hold pictures and short accounts of experiences just as grown-up travellers often do. In a handwork lesson these tripbooks take orm. Each must have a title, a cover design, and perhaps a copy of the Lincoln Highway marker for a tail piece. On the first page is pasted a picture of the chosen automobile and some of the new equipment.

One lesson takes them from New Britain to New York where the Lincoln Highway begins. In the first supervised study period books and magazines are searched for maps and pictures of the route, and of New York where they take side trips. As pertinent material is discovered a list is made by each child, thus; McMurray and Parkins, Book II, p. 14, map of Connecticut; p. 13, The Harkness Quadrangle Tower of Yale University, New Haven, Conn.; p. 79, Fig. 103, Singer Sewing Machine Factory at Bridgeport, Conn. Before the next lesson these reports are examined and a composite list of the best material is placed on the blackboard. Each map or picture thus selected is examined under the teachers guidance. Such facts as the exact route followed, the general surface of the region, the farm crops seen, the large cities crossed, type industries in those cities, and places of historical or educational interest are noted. In the meantime at home, further search is made for "Snapshots" to put in the tripbook. At least a page is allowed for each stage of the journey. The page may contain besides pictures, a list of references, a map, advertisements of articles manufactured in the cities visited, and observations written in the language period. As many of the children have been over at least a portion of this first stage of the journey, it is studied quite thoroly so that it may serve as a basis of comparison with other regions as they are crossed.

When unfamiliar sections are reached, short paragraphs of description from the books are hunted out and read to the class, or sometimes copied into the tripbooks, as:

> Pittsburgh on the Ohio River, and the group of smaller cities around it is engaged in the manufacture of iron, steel goods, and glass. The fuel for the furnaces, comes from the coal fields and natural gas wells, and large quantities of iron ore are shipped in from mines in the Lake Superior Region. Brigham and McFarlane, Book I, p. 107.

The children follow the highway on and on, with an occasional sidetrip if time permits. The tripbooks grow and so does the enthusiasm of the children and of their teacher for this method of study. We notice a different attitude toward the textbooks, and a growing ability to use a table of contents, or an index, and to read maps and pictures.

Our use of books is much the same all thru the year, but the desire to use them is aroused in different ways. While studying the North Polar Region we decided to make what the children called a "movie show." On large pieces of cardboard are pasted or drawn northland scenes. Sometimes these are cut from paper in the art class. Each scene requires much study of the books, for it must be true to type and accompanied by carefully worded descriptive material. If oral English is needed the children take turns being Mr. or Mrs. Peary and describe their experiences. These pictures are moved across the stage by the children and furnish a popular finish for many of our type studies. When another class is invited to see the "movie we made" there is much pride and enthusiasm. Do not such studies as "Wild Animals of Equatorial Africa," "A Trip by Caravan across the Sahara," or "The Travels of a Golden Plover" make you want to come to our movies too?

We also make use of the sand table, dramatization, and special reports, but back of each project is a steady training in the use of books and other school equipment. We believe this training will carry over to future work. For correlation in the normal school we discuss methods of handling these lessons and demonstrate some of the steps. We make card catalogs of reference material, and collect in carefully labelled envelopes pictures to use with each study. We too have lessons in reading maps and pictures and use our books for the materials needed rather than as reading books.

ANNUAL MEETING OF THE NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

CINCINNATI, OHIO, 1923

The National Council held its annual meeting at the University of Cincinnati, December 26-27, 1923. All sessions were well attended; the papers presented were strong and carefully prepared; freedom and thoroness of discussion were pronounced features; a maturing determination to accomplish definite, constructive work was evidenced. There was a strong expression of sentiment that those charged with committee work should actually accomplish something of a concrete nature. It is evident that this must be done if the National Council is to function as an effective agency in the field of geographic education. All committees dealing with specific problems were instructed to complete tentative conclusions and submit the same for consideration and publication at the earliest possible date.

The three outstanding papers dealt with junior high school geography, the use of geographic principles, and traditional geography

and present trends. These papers will appear in full in the *Journal*. The Council took a definite stand against the great body of detail now incorporated in elementary school textbooks. It also has undertaken to prepare a score card for judging textbooks. It is probable that junior high school geography and the use of geographic principles in teaching will be the central themes of the next meeting. The next annual meeting will be held in Washington, D. C., probably Monday, December 29, 1924.

The annual meeting of the Board of Directors and Executive Committee was held December 26 and the following business was transacted.

1. Upon motion of the nominating committee the following officers were elected:
President, W. R. McConnell, Miami University, Oxford, Ohio.
Vice President, Frederick K. Branom, Chicago Normal College, Chicago, Illinois.
Vice President, Julia Shipman, State Normal School, New Britain, Connecticut.
Secretary, George J. Miller, State Teachers College, Mankato, Minnesota.
Treasurer, Douglas C. Ridgley, Clark University, Worcester, Massachusetts.
Members of Executive Committee, terms to expire December, 1926: R.M. Brown, Rhode Island College of Education, Providence; C. C. Colby, University of Chicago; Richard E. Dodge, Storrs, Connecticut.
Directors at Large: Myrta McClellan, University of California, Los Angeles; C. E. Cooper, Ohio University, Athens; Fred J. Breeze, State Normal School, Muncie, Indiana; Mendel E. Branom, Harris Teachers College, St. Louis, Missouri; Elizabeth Martin, State Normal School, Cheney, Washington; Mable Stark, University of California, Berkeley; Erna Grassmuck, State Department of Public Instruction, Harrisburg, Pennsylvania; Ellen Semple, Louisville, Kentucky.

2. Dr. A. E. Parkins was instructed to continue the magazine service established in 1920.

3. Professor D. C. Ridgley was directed to continue and extend the membership campaign.

4. The committee on elementary school geography was directed to prepare tentative standards of attainment for the first six grades. The committee members are Erna Grassmuck, chairman, D. C. Ridgley and a third member to be appointed.

5. The committee on junior and senior high school geography was continued.

6. Mr. W. M. Gregory was appointed chairman of a committee of three to draft a tentative score card for geography textbooks. He was instructed to appoint other members of his committee.

7. Mr. E. E. Lackey was appointed chairman of a committee of three to study the problem of standard tests in geography and make such recommendations to the Executive Committee as seem desirable. He was authorized to select the other members of his committee.

8. The following statement was unanimously endorsed as expressing the opinion of the National Council. The statement was likewise endorsed at the general session of the National Council December 27.

It is the judgment of the National Council of Geography Teachers that textbooks in geography for the grades contain too many unrelated facts, too severely compressed. We recommend that a smaller number of loosely related facts be presented, thus leaving opportunity for a fuller and richer treatment of selected topics—topics selected with greater consideration of children's abliities and proper interests at the grade school age.

GEO. J. MILLER, *Secretary*

GEOGRAPHICAL NEWS

A NOTABLE ACHIEVEMENT IN KENTUCKY GEOGRAPHY

During the past three years, the Kentucky State Geological Survey has had in progress a series of regional geographic studies covering the state of Kentucky. The past summer witnessed the completion of the field work for six of these, and within the coming year, some and probably all of the published reports will be available.

In this survey of the state, work has been done in the following areas: the Jackson Purchase, the northern portion of the Mississippi Embayment area or the portion of Kentucky west of the Tennessee River; the Kentucky Mountains, the maturely dissected plateau comprising the eastern portion of the state; the Blue Grass, the area of outcrop of Ordivician strata; the Western Coal Field, the coal mining area of western Kentucky; the Knobs, an area characterized by conical hills, encircling the Blue Grass; and the Mississippian Area, characteristically an area of limestone outcrop, sometimes referred to as the Lower Carboniferous Plateau.

The reports will be issued as six separate bound volumes of approximately two hundred pages each. All will be illustrated by diagrams and pictures to aid in conveying an accurate impression of existing conditions. Taken together, these reports should give a comprehensive idea of the conditions and possibilities of Kentucky. The set of reports furnishes a rather complete study of the state and the bibliographies give the reader sources of additional information concerning phases of the physical equipment of the areas discussed.

Altho these reports are by different geographers and will differ to some extent in presentation, the aim in all has been to describe and account for existing differences in density of population and occupation in terms of regional opportunity and handicap, to direct attention to maladjustments and to evaluate the possibilities of the future. What makes these reports especially interesting and valuable is that all studies were made recently and during essentially the same period so that a unified picture of present conditions in Kentucky is presented.

The State of Kentucky is fortunate in that its Geological Survey has seen fit to sponsor such a comprehensive study. Altho a few isolated geographic studies have been made in other states, Kentucky is the first state to carry the work so far toward completion.

This survey has apparently met with popular approval if such approval can be measured in terms of demand for the published results. The edition of the only report as yet available, the one on the Purchase, altho issued less than six months ago, is practically exhausted the demand coming from such widely scattered sources as to indicate a very general interest in Kentucky geography.

It is hoped that the information embodied in these separate reports may be edited and the different areas given uniform treatment, the results of such unification and consolidation being published in one volume as a Geography of Kentucky—a companion volume to A. M. Miller's Geology of Kentucky.

These reports are distributed by the survey at the nominal price of thirty cents each, which covers packing and postage. Inquiries should be sent to Dr. W. R. Jillson, Director and State Geologist, Frankfort, Kentucky. Teachers of geography, particularly Kentucky teachers, should not neglect this opportunity to secure the publications as issued. This is particularly true of the first report, the edition of which is virtually exhausted and which it will soon be impossible to obtain.

Geography at the University of Michigan has been given the status of an independent department with Dr. K. C. McMurry as acting chairman. Dr. Preston E. James has been added to the teaching force.

The University of California at Berkeley, has established a department of geography with Dr. C. O. Sauer in charge.

The University of Minnesota reestablished the work in geography which was discontinued a few years ago, and placed Dr. D. H. Davis in charge.

Teachers College of Columbia has added Mr. DeForest Stull of the Marquette (Mich.) State Normal School to the teaching staff of its geography department

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The Minnesota Council of Geography Teachers had an attendance of more than 500 at its meeting in November. The principal speakers were Dr. N. O. Bengtson of the University of Nebraska, and Miss Edith Parker of the University of Chicago. Round table conferences and field trips added to the value and pleasures of the meeting which was pronounced one of the best ever held.

The geography teachers of Texas held an all day session in Fort Worth on November 30, 1923. Both sessions were well attended by an enthusiastic body of teachers who are ready to work for better geography instruction in the schools of the state. Definite plans were made to do a constructive piece of work each year that will be of value to each member and to the cause of better geography teaching in Texas. A type study of one of the continents will be prepared during the coming year. Mr. George J. Miller, Editor of the *Journal of Geography*, was the principal speaker from outside the state.

The Department of Commerce is establishing a new policy of publishing from time to time monographs in popular form, tastefully printed, dealing with important subjects covered by the last decennial census, in order to convey to the public in nontechnical fashion some of the interesting material which the Bureau of the Census secures in such large quantity. The first of these census monographs, on the "Increase of Population in the United States, 1910-1920" has been issued and proves to be an absorbingly interesting story of the changes which occurred in the American people as regards their number, and in the composition of the population by sex, color, and nativity during the eventful years from 1910 to 1920. It is essentially a history of the United States for a brief period in terms of statistics, perhaps the first history of this kind that has ever been written. The volume consists of 255 pages, is printed on good paper with wide margins, and contains a large number of cartograms illustrating the changes which have occurred. The necessity for economizing in printing expenditures forbids a wide free distribution, but the book may be obtained for the nominal price of $1 by applying to the Superintendent of Documents, Washington, D. C., inclosing the price.

GEOGRAPHICAL PUBLICATIONS

J. Paul Goode. **School Atlas.** 96 pages of colored maps (about 300), 41 pages of index. Rand McNally and Co., Chicago, Ill. 1923. $4.00

All geographers, acquainted with both the American and European atlases, will unanimously proclaim Goode's "School Atlas" the best ever offered to American colleges and schools and the general public. This Atlas represents the highest attainment of American map-makers and shows what map engravers and printers may do when a master cartographer is given the opportunity of directing their work and forcing them to do his bidding.

The Atlas will fill a long-felt need for a usable set of maps in geography, history, literature, and other classes in our colleges and normal schools. There are few courses in these subjects in which it will not be serviceable. It will be invaluable to elementary schools the country over, for it will give the pupils at a very reasonable price a wealth of maps that may supplement those in the geography text in use.

The aim of the author as stated in the Foreword has been to prepare an atlas "to meet the needs of American students by presenting material of greatest teaching value in Ameri-

can schools." It is the sincere wish of the author that the Atlas "will help toward the better teaching of geography and will lead to a greater appreciation of fine maps and a keener pleasure in their use during and after school days."

The maps may be classified as physical, commercial, economic, climatic, plant, and population density, besides many miscellaneous ones. Included in the latter type may be mentioned diagrams explaining map projections, a drawing and a map to explain contour lines and the color scheme, a set of maps for a study in scales, races of men, the great religions, the ice age in North America, maps showing the ice sheets of the Glacial Period in North America, territorial growth of the United States, routes of explorers in the United States and trails and roads, natural forests and national parks, a large soil map of the United States, maps of a large number of cities, detailed maps of important areas, a language map of Europe on a large scale, one diagram showing the comparative size of continents, others of islands and lakes.

Most of the city maps are on the same scale, one inch to eight miles. The value of this is apparent to everyone. The scale of the city maps is large enough to indicate the character of the street pattern and to give the location of the parks and railroads within and about the city, also the shape of the harbors, the main roads surrounding the city, and the rivers. Some of the city maps are large enough and include enough surrounding territory to show the essential facts about the city's location. The Portland, Oregon, map, for example, shows the lower Columbia River and the mountain topography to the east and the west of the city.

The most important maps of the Atlas are, of course, the physical maps of the continents and divisions of continents. There are no so-called political maps; hence the physical maps carry culture. The author has striven in his maps to secure softness of tone, yet sufficient contrast to bring out the topographic features, warm, pleasing color effects, beauty and style of type, and legibility. The latter is secured by avoiding the loading of the map with place names, by clear-cut coast lines and drainage lines, and by the omission of contour lines. The maps are complete enough in place names to answer the demands of most classes in college geography yet are simple enough for pupils in the grades. The traditional color scheme of green, yellow, and brown, characteristic of most physical maps, is followed. To give legibility to the maps, high altitudes above ten thousand feet are shown in a dark transparent red wonderfully pleasing in tone. Cities on the large-scale physical maps are shown in a brilliant red with due regard to the size and outline of the city. Ocean depths are indicated in the blue.

The maps of the continents are subdivided. For North America, for example, there is a moderately large scale map (one to twelve million) of Alaska and western Canada, one of Canada as a whole, the United States as a whole, northern United States east of the Mississippi, Washington and Oregon, California, and Mexico and the American Mediterranean. Later one on the Southern States will probably be included.

All the more important regions of the world are shown in still larger scales. For each continent there is a set of eight maps in colors, arranged to facilitate their comparison. These maps are the essential maps for interpretative geography—relief, January and July normal surface temperatures, January and July isotherms, winds and rainfalls, annual rainfall, education, and density of population.

The list of climatic and economic maps of the United States is especially complete.

Dr. Goode's atlas is sure to be favorably received by teachers of geography, school authorities, and the general public.

A. E. PARKINS

George Peabody College for Teachers

Stephen S. Visher. **Economic Geography of Indiana.** 219 pages. 30 photographs, 115 maps (1 colored). D. Appleton and Co., New York. 1923. $1.05

This book adds to the list of state geography texts, and will prove of great value to the teachers of geography in Indiana. Dr. Visher has brought together many interesting and

valuable data on the economic activities of the state, which are admirably illustrated by a wealth of small black and white maps. Small dot maps showing the development of Indiana agriculture have been taken from O. E. Baker's "Graphic Summary of American Agriculture" in the 1921 Yearbook of American Agriculture. These have been reproduced on a small scale, and are extremely effective in supplementing the text. Geographers might well learn from this book the value of including such an abundance of maps.

Another excellent feature of this book is the compilation of statistics by regions. Physiographic regions, drawn by C. A. Malott in the Handbook of Indiana Geology, 1922, are used. A black and white map of these regions is found on page 18. Since they are of such great importance thruout the text, one wonders why the one colored map, placed at the beginning of the book, was not a regional map instead of the old-fashioned patch-work county map. Furthermore, the map on page 18 might be improved by the choice of symbols to convey some idea of the type of the relief by shading. For example, the darker shading now represents in one case a lowland, in another a slope. A rearrangement of the symbols would have made this map more striking. However, these regions are made the basis for a series of tables later in the book, showing the regional contrasts in several phases of the land utilization. This relates the discussion of the environmental factors with the discussion of the economic factors in a very desirable way.

It is unfortunate that a book which will be used as widely as this one should be open to the charge of poor English. Many of the sentences are clumsy and involved, anything but the clear style which is so essential to a first-class textbook. In one or two places there are actual grammatical errors.

In many places the writer becomes distinctly partial to Indiana. Many favorable points are dwelt on at considerable length, while one or two less favorable or unfavorable points are entirely omitted. This is a common characteristic of most of our state geographies, and is possibly necessary in order to impress many non-scientific buyers. If geography is to fill its place in modern society, however, one of its functions is not only to tell the truth concerning other people and other lands, but also to speak fearlessly about one's own land and people. Only in this way can a true perspective be gained.

PRESTON E. JAMES

University of Michigan

Darrell Haug Davis. **The Geography of the Jackson Purchase.** 185 pp., 100 maps, diagrams, and photos. Kentucky Geological Survey, Frankfort, Ky. 1923

This book well deserves the attention of those interested in the progress of American regional geographic publication. As the first of a series of publications by the Kentucky Geological Survey dealing with the natural divisions of the state it inaugurates a most commendable policy. Such a policy, if generally followed, might shortly fill the great gaps which exist in the detailed geographic data of the United States. It is to be hoped that the books which follow in the series will maintain the high standard of work set by this first report.

The study covers a distinct geographic region of the state, the area lying west of the Tennessee River. Part 1, "The Natural Environment," is an adequate description of the geographic setting. Each of the principal elements is treated separately. Part 2, "The Subdivisions of the Purchase," definitely outlines the smaller but clearly differentiated parts of the larger whole. Part 3, "The Economic Situation," deals with the utilization of the resources, and the economic relations of man to the region.

A great amount of detailed information is found thruout the report. While the literature has been carefully covered, the greater part of the content indicates original work in the field. Census data are used liberally, and the many maps and diagrams mark a distinct advance in the significant presentation of such data. The illustrations are excellent and both the pictures and captions are remarkably illuminating. The whole book has a distinct geographic flavor.

Part 2, "The Subdivisions of the Purchase," gives promise of a type of logical organization which is not carried out fully. The report would be more valuable if the discussion of the economic situation were organized on the basis of the geographic subdivisions. These subdivisions do not follow political lines, and hence the statistical data, which form the backbone of this part of the study, do not apply to advantage in such an organization. The report not only adds much to our knowledge of the region, but raises an important question in regard to the possibilities of intensive field studies. Until field work can provide quantitative data for such small geographic divisions, this difficulty must persist, unless, by chance, natural and political divisions coincide.

K. C. MCMURRAY

University of Michigan

G. F. Bosworth. **Senior Geography.** 507 pp., 101 maps, diagrams, and photos. Cambridge University Press (Macmillan Co., N. Y.), London. 1922

The Senior Geography is the third of a series of texts designed to cover the geographical material "for most of the examinations for pupils in the higher forms of central and secondary schools" of England. The first sixty-five pages are devoted to general topics as, the shape and size of the earth; seasons; maps and surveying; map projections; land and water; climate and the distribution of life. The last nineteen pages contain "Questions and Exercises." The rest of the book summarizes the principal facts about each country of the world. The text is distinctly encyclopedic in character, and hence its chief value to American teachers will be as a reference. It will be found very useful for this purpose.

E. G. Skeat (Mrs. Woods). **The Principles of Geography, Physical and Human.** 432 pp., 150 maps, diagrams and photographs. Oxford University Press, American Branch, N. Y., 1923. $2.20

An account of the evolution of ideas regarding the shape and origin of the earth introduces the reader to the main treatment of the book which is a description of the atmosphere, hydrosphere and lithosphere of the earth. This description, together with a discussion of the physical agents that have remodelled the surface of the earth, occupies more than two-thirds of the book. The style of the work is encyclopedic. According to the preface, the work was undertaken to supply a convenient book of facts to the busy teacher who finds himself in a "position of bewilderment and difficulty" when "translated from the world of beckoning books and ever-willing teachers to the intense isolation—in these respects—of the school."

The next one hundred pages deal with the human phases of the text. The author asserts that man was in the remote past in the grip of his environment. "The manner in which he freed himself, yet always remaining bound in essentials, is the whole history of human geography." Mrs. Woods traces the development of human life as related to the tropical and temperate forests, the grasslands, and the hot and cold deserts. She next deals with the concentrations of populations in river valleys, around inland seas, along the Atlantic and Pacific rims. The concluding section deals with the origin of cities and the movements of population.

Some interesting human adjustments are noted, but most of them relate to primitive peoples, or to remote historical events. Very few concrete illustrations are cited of man's present relationships to his environment. The book covers too much ground. Thus, in the development of cities, often just one environmental factor is cited as the determining factor in accounting for the location of the city.

Five pages of bibliography accompany the text. The thirty-three pages of index indicate how carefully that part of the work has been done.

CORA P SLETTEN

State Teachers College,
Mankato, Minnesota

Frederick K. Branom, **A Bibliography of Recent Literature on the Teaching of Geography.** 21 pp. Clark University, Worcester, Mass. 1923. $0.15

The author has made a careful selection of the more recent literature, appearing in book form and in periodicals, and arranged it under suitable headings. This arrangement makes it possible for the teacher who desires references dealing with a specific subject—as "Problems and Projects"—to turn to this list and find them. Teachers, supervisors, administrators will find this list of great value. It is interesting to note that about half of the periodical references are from the *Journal of Geography*.

Glen I. Trewartha, **Climates of the World, with Introductory Exercises on the Climatic Elements.** Wisconsin Geographical Press, Madison, Wis. 1923. $0.35

"Climates of the World" presents in a concise form the fundamental facts of climate that are the basis for geographical study. It combines text, exercises, maps, and diagrams so that students may work out various phases of the subject in a satisfactory manner. The maps include temperature, pressure, winds, rainfall, weather, and a large outline map for climatic provinces. The publication is one of those clearly practical ones that will prove of definite help to teacher and student.